

CLAIMS:

1. A device for shaving hair, comprising a base portion having a grip, at least one cutting member having a cutting edge and a cutting direction, and an actuator for effecting a periodical motion of the cutting member relative to the base portion, characterized in that the periodical motion is effected substantially in an imaginary plane extending transversely to the cutting edge and has a first motion portion and a second motion portion following the first motion portion, the first motion portion being mainly directed in the cutting direction, and the second motion portion being mainly directed opposite to the cutting direction and being closer to the skin, during operation, than the first motion portion.
2. A device as claimed in Claim 1, characterized in that the periodical motion has a frequency between approximately 100 Hz and approximately 1000 Hz.
3. A device as claimed in Claim 2, characterized in that the periodical motion has a frequency of approximately 200 Hz.
4. A device as claimed in Claim 1, characterized in that the periodical motion is a substantially elliptical motion having a major axis and a minor axis, the major axis being mainly directed parallel to the cutting direction.
5. A device as claimed in Claim 4, characterized in that the major axis has a length between approximately 0.1 mm and 0.6 mm and the minor axis has a length between approximately 0.02 mm and 0.15 mm.
6. A device as claimed in Claim 5, characterized in that the major axis has a length of approximately 0.4 mm and the minor axis has a length of approximately 0.05 mm.
7. A device as claimed in Claim 4, characterized in that the device has a skin contact member which defines an imaginary skin contact surface along which the device is in

contact with the skin during operation, wherein the major axis and the skin contact surface enclose an angle between approximately -30° and approximately $+30^{\circ}$.

8. A device as claimed in Claim 7, characterized in that the major axis extends substantially parallel to the skin contact surface.

9. A device as claimed in Claim 1, characterized in that the cutting member is arranged in a shaving head which is mounted to the base portion, the actuator effecting a periodical motion of the cutting member relative to the shaving head.

10. A device as claimed in Claim 1, characterized in that the cutting member is mounted in a shaving head which is mounted to the base portion, the actuator effecting a joint periodical motion of the shaving head and the cutting member relative to the base portion.

11. A device as claimed in Claim 1, characterized in that the device is provided with at least a first cutting member and a second cutting member, wherein the actuator effects a first periodical motion of the first cutting member and a second periodical motion of the second cutting member, and wherein at least one of the two motion portions of the first periodical motion and of the second periodical motion have different parameters.

12. A device as claimed in Claim 4, characterized in that the cutting member is mounted to a carrier which is driven by the actuator via a transmission comprising a first and a second eccentric member which are driven by the actuator at equal rotational speeds about separate axes of rotation extending parallel to the cutting edge, said first eccentric member having a fixed position relative to the carrier in a direction parallel to the major axis and a free position relative to the carrier in a direction parallel to the minor axis, and said second eccentric member having a free position relative to the carrier in a direction parallel to the major axis and a fixed position relative to the carrier in a direction parallel to the minor axis.

13. A shaving head suitable for use in a device for shaving hair, said shaving head comprising at least one cutting member having a cutting edge and a cutting direction, and a coupling member by means of which the shaving head can be coupled to a base portion of said device, said base portion comprising an actuator for effecting a periodical motion of the cutting member relative to the base portion, characterized in that the periodical motion is

effected substantially in an imaginary plane extending transversely to the cutting edge and has a first motion portion and a second motion portion following the first motion portion, the first motion portion being mainly directed in the cutting direction, and the second motion portion being mainly directed opposite to the cutting direction and being closer to the skin, during operation, than the first motion portion.